NOAA Teacher at Sea
Karolyn Braun
Onboard NOAA Ship KA'IMIMOANA
October 6 – 28, 2006

NOAA Teacher at Sea: **Karolyn Braun**
NOAA Ship KA'IMIMOANA
Mission: TAO Buoy Array Maintenance
Monday, October 23, 2006

Plan of the Day
200 CTD 1S/170W
600 CTD profile .5S/170W
930 TAO dive op for repair 0/170W
1200 CTD and AOML
1800 CTD profile .5N/170W
2200 CTD 1N/170W

Very busy day. Was up bright and early to conduct the 600 CTD profile. Had some breakfast and did some cleaning around the stateroom. Around 9 a.m. I updated my KA'IMIMOANA intranet webpage. I am glad I learned how to use the Frontpage program as it may come in handy. I went and sat in the 'pool' for a bit before lunch, but overall had a lazy morning.

The drifter buoy sets sail for its long journey on the sea.

After a light lunch we conducted a 4000m CTD cast, which took about 4 hours then deployed the AOML drifter buoy, the third of three that ASCC has adopted. The modern drifter is a high-tech version of the "message in a bottle". It consists of a surface buoy and a subsurface drogue (sea anchor), attached by a long, thin tether. The buoy measures temperature and other properties, and has a transmitter to send the data to passing satellites. The drogue dominates the total area of the instrument and is centered at a depth of 15 meters beneath the sea surface. The drifter sensors measure data such as sea surface temperature, average the data over a

window (typically 90 seconds), and transmit the sensor data at 401.65 MHz. Each drifter transmitter is assigned a Platform Terminal Transmitter (PTT) code, often referred to as the drifter ID. These Bouys are deployed by NOAA's Atlantic Oceanographic and Meteorological Laboratory or AOML.

While Tonya completed the CTD cast, I got to help the ship's deck crew with a little Bosun Locker Clean-up. There was a pod of about 100 or so Pilot whales that crossed our path. Very cool to see! I got in a workout, then at 6 p.m. it was time to do another CTD profile.